

### Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1-22. (Canceled)

Claim 23. (Currently amended) A process for assessing ~~the~~ mitochondrial toxicity of a compound that includes contacting nucleic acids from a host with an amplification reaction mixture that contains at least two primers ~~and/or probes~~ that provide detectable signals ~~during a polymerase chain reaction~~, wherein

~~the~~ a first primer ~~and/or probe~~ provides a first detectable signal upon ~~on the~~ ~~occurrence on the transcription~~ amplification of a host mitochondrial nucleic acids; and

~~the~~ a second primer ~~and/or probe~~ provides a second detectable signal upon ~~on the~~ ~~occurrence on the transcription~~ amplification of a host nuclear nucleic acid; and  
comparing the first and second detectable signals.

Claim 24. (Original) The process of claim 23, wherein the host mitochondrial nucleic acid is mitochondrial DNA.

Claim 25. (Original) The process of claim 23, wherein the host mitochondrial nucleic acid is mitochondrial RNA.

Claim 26. (Original) The process of claim 23, wherein the host mitochondrial nucleic acid is a non-coding sequence.

Claim 27. (Original) The process of claim 26, wherein the non-coding sequence is a 5'-non-coding sequence.

Claim 28. (Original) The process of claim 26, wherein the non-coding sequence is a 3'-non-coding sequence.

Claim 29. (Original) The process of claim 26, wherein the non-coding sequence is an intron.

Claim 30. (Canceled)

Claim 31. (Canceled)

Claim 32. (Original) The process of claim 23, wherein the host mitochondrial nucleic acid is a coding sequence.

Claim 33. (New) The process of claim 23, wherein the host nuclear nucleic acid is DNA.

Claim 34. (New) The process of claim 23, wherein the host nuclear nucleic acid is RNA.

Claim 35. (New) The process of claim 23, wherein the host nuclear nucleic acid is a nuclear non-coding sequence.

Claim 36. (New) The process of claim 35, wherein the nuclear non-coding sequence is a 5'-non-coding sequence.

Claim 37. (New) The process of claim 35, wherein the nuclear non-coding sequence is a 3'-non-coding sequence.

Claim 38. (New) The process of claim 35, wherein the nuclear non-coding sequence is an intron.

Claim 39. (New) The process of claim 35, wherein the nuclear non-coding sequence is from a gene part of which codes for  $\beta$ -actin.

- Claim 40. (New) The process of claim 35, wherein the nuclear non-coding sequence is from a gene part of which codes for GAPDH.
- Claim 41. (New) The process of claim 23, wherein the host nuclear nucleic acid is a coding sequence.
- Claim 42. (New) The process of claim 23, wherein the second primer comprises SEQ ID No. 1.
- Claim 43. (New) The process of claim 23 further comprising wherein at least one detectable signal is provided upon interaction of at least two primers, wherein the detectable signal is caused by the hybridization of a third primer with a detectable agent to a primer that does not have a detectable agent which is hybridized to a host nucleic acid sequence.
- Claim 44. (New) The process of claim 43 wherein the third primer comprises SEQ ID No. 2.
- Claim 45. (New) The process of claim 44, wherein the reaction mixture further comprises a fourth primer.
- Claim 46. (New) The process of claim 45, wherein the fourth primer which comprises SEQ ID No. 3.
- Claim 47. (New) The process of claim 46 wherein the reaction mixture further comprises a reporter and a quencher molecule.
- Claim 48. (New) The process of claim 47 wherein the reporter molecule is FAM and the quencher molecule is TAMRA.
- Claim 49. (New) The process of claim 43, wherein the first primer comprises SEQ ID No. 19.

- Claim 50. (New) The process of claim 49, wherein the reaction mixture further comprises a fifth primer.
- Claim 51. (New) The process of claim 50, wherein the fifth primer comprises SEQ ID No. 20.
- Claim 52. (New) The process of claim 51, wherein the reaction mixture further comprises a sixth primer.
- Claim 53. (New) The process of claim 52, wherein the sixth primer comprises SEQ ID No. 21
- Claim 54. (New) The process of claim 53 wherein the reaction mixture further comprises a reporter and a quencher molecule.
- Claim 55. (New) The process of claim 54 wherein the reporter molecule is TET and the quencher molecule is TAMRA.
- Claim 56. (New) A kit for assessing toxicity comprising a mixture of oligonucleotides comprising at least one first primer that provides a detectable signal on the occurrence of amplification of mitochondrial nucleic acid; and at least one second primer that provides a second detectable signal on the occurrence of amplification of host nuclear nucleic acid.
- Claim 57. (New) A kit as in claim 56 wherein the second primer comprises SEQ ID No. 1 and SEQ ID No. 2.
- Claim 58. (New) A kit as in claim 57 further comprising SEQ ID No. 3.
- Claim 59. (New) A kit as in claim 58 further comprising a fluorescent dye and a quenching dye.
- Claim 60. (New) A kit as in claim 56 wherein the first primer comprises SEQ ID No. 19.

Claim 61. (New) A kit as in claim 60 further comprising a third primer that comprises SEQ ID No. 20.

Claim 62. (New) A kit as in claim 61 further comprising a sixth primer that comprises SEQ ID No. 21.

Claim 63. (New) A kit as in claim 62 further comprising a fluorescent dye and a quenching dye.